

Routing Requests



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Overview



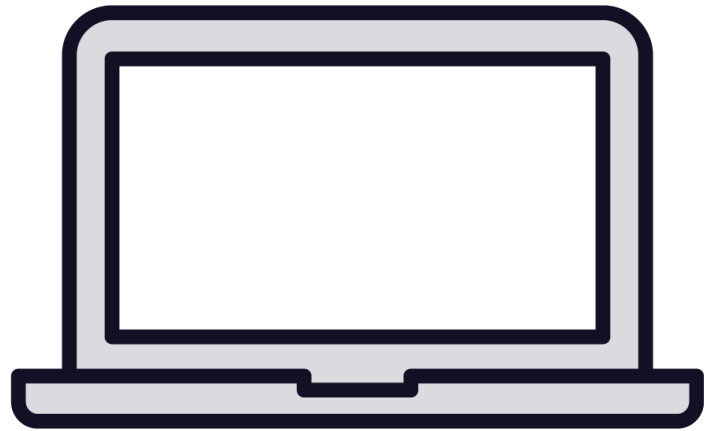
Routing Requirements

Basic Routing

Parametric Routing

Common Third-party Routers

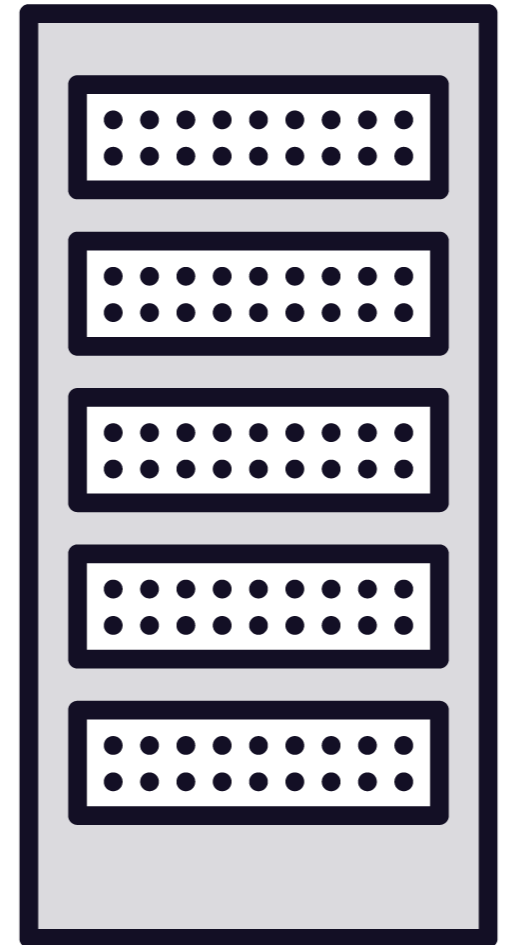




**Request a single resource
/customers**

**Request a resource collection
/customers/**

**Request a resource by parameter
/customers/{id}**



Basic Routing

```
http.Handle(pattern string, handler http.Handler)
```

```
// request a single resource
```

```
http.Handle("/customers", handler) // request the customers resource
```

```
// request a resource collection
```

```
http.Handle("/customers/", handler) // request the customers collection
```



Parametric Routing

String Splitting

```
func handlerFunc(w http.ResponseWriter, r *http.Request) {
```

Parametric Routing

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func handlerFunc(w http.ResponseWriter, r *http.Request) {  
    path := r.URL.Path // "/customers/123/address/city"  
  
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Parametric Routing

String Splitting

```
func handlerFunc(w http.ResponseWriter, r *http.Request) {  
    path := r.URL.Path // "/customers/123/address/city"  
  
    parts := strings.Split(path, "/")  
    // [ "" "customers" "123" "address" "city" ]  
  
}
```



Parametric Routing

String Splitting

```
func handlerFunc(w http.ResponseWriter, r *http.Request) {  
    path := r.URL.Path // "/customers/123/address/city"  
  
    parts := strings.Split(path, "/")  
    // [ "" "customers" "123" "address" "city" ]  
  
    // validate the parameters and route the request  
}
```



Parametric Routing

Regular Expressions

```
func handlerFunc(w http.ResponseWriter, r *http.Request) {  
    path := r.URL.Path // "/customers/123/address/city"  
  
}
```



Parametric Routing

Regular Expressions

```
var pattern = `^\/customers\/(\d+?)\/address\/(\S+?)`
```

```
func handlerFunc(w http.ResponseWriter, r *http.Request) {  
    path := r.URL.Path // “/customers/123/address/city”  
  
}
```



Parametric Routing

Regular Expressions

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func handlerFunc(w http.ResponseWriter, r *http.Request) {  
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func handlerFunc(w http.ResponseWriter, r *http.Request) {  
    path := r.URL.Path // "/customers/123/address/city"  
  
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Parametric Routing

Regular Expressions

```
var pattern = `^\/customers\/(\d+?)\/address\/(\S+?)`  
var exp regexp.Regexp = regexp.MustCompile(pattern)  
  
func handlerFunc(w http.ResponseWriter, r *http.Request) {  
    path := r.URL.Path // "/customers/123/address/city"  
  
}
```



Parametric Routing

Regular Expressions

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var pattern = `^\/customers\/(\d+?)\/address\/(\S+?)`  
var exp regexp.Regexp = regexp.MustCompile(pattern)  
  
func handlerFunc(w http.ResponseWriter, r *http.Request) {  
    path := r.URL.Path // "/customers/123/address/city"  
  
    matches := exp.FindStringSubmatch(path)  
    // [ "/customers/123/address/city" "123" "city" ]  
  
}
```



Parametric Routing

Regular Expressions

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var pattern = `^\/customers\/(\d+?)\/address\/(\S+?)`  
var exp regexp.Regexp = regexp.MustCompile(pattern)  
  
func handlerFunc(w http.ResponseWriter, r *http.Request) {  
    path := r.URL.Path // "/customers/123/address/city"  
  
    matches := exp.FindStringSubmatch(path)  
    // [ "/customers/123/address/city" "123" "city" ]  
  
    // validate the parameters and route the request  
}
```



Common Third-Party Routers

gorilla/mux

go-chi/chi



Overview



Routing Requirements

Basic Routing

Parametric Routing

- String splitting
- Regular expressions

Common Third-party Routers

- gorilla/mux
- go-chi/chi

